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REDESCRIPTION OF THE LITTLE KNOWN GENUS *EBURGEMELLUS* SCHOORL, 1990 (LEPIDOPTERA: COSSIDAE)

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Summary. The redescription and diagnosis of the poorly studied genus *Eburgemellus* Schoorl, 1990 are given. This monotypic genus is endemic to Central and Western Africa. The male genitalia image, the imago of female and the distribution map of the type species are given for the first time.

Key words: carpenter moths, Cossidae, *Eburgemellus*, taxonomy, fauna, Africa.

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Резюме. Даны переписание и диагноз малоизученного рода *Eburgemellus* Schoorl, 1990 – эндемика Центральной и Западной Африки. Впервые приводится изображение гениталий самца, имаго самки и карта распространения типового вида этого монотипического рода.

INTRODUCTION

Carpenter moths (Lepidoptera, Cossidae) of Africa were studied fragmentary. Only the faunas of Malawi (Yakovlev & Murphy, 2013), Zimbabwe (Yakovlev & Lenz, 2013), Zambia (Yakovlev, 2014a), Swaziland (Yakovlev & Witt, 2016), and South Africa (Mey, 2015, 2016) have been completely listed. For several genera there are still no accurate diagnoses, morphological structures have not been described. This also refers to the poorly known genus *Eburgemellus* Schoorl, 1990, allocated by Schoorl (1990: 109) for *Xyleutes geminatus* Gaede, 1930. As it has been repeatedly said before (Yakovlev, 2011, 2014b), Schoorl used in his works very complicated features of Cossidae imago thorax structure and anatomical features of wing joints. The following apomorphic features are indicated for *Eburgemellus* (Schoorl, 1990: 109, 119, fig. 60): mesepimeron moderately high, paronychial wanting, arolium minute, fringes moderately short. However, the external characters and genital morphological structures have not been examined. *Eburgemellus* was described as a part of the subfamily Zeuzerinae Boisduval, [1828] and assigned by Schoorl to "Section 1" together with *Oreocossus* Aurivillius, 1910 (type species – *Duomitus kilimanjarensis* Holland, 1892), *Phragmataecia* Newman, 1850 (type species – *Phalaena (Bombyx) arundinis* Hübner, [1808]), *Zeuzeropecten* Gaede, 1930 (type species – *Zeuzeropecten lactescens* Gaede, 1930) and one non-described genus from Madagascar.

The study was based on the materials from the following collections: BMNH – Natural History Museum (London, G.B.); MRAC – Museum Royal of Central Africa (Tervuren, Belgium); MWM – Museum of Thomas Witt (Munich, Germany). Genitalia slides were examined with a Zeiss Stemi 2000 C microscope and images were taken with the Olympus XC 50 camera.

TAXONOMY PART

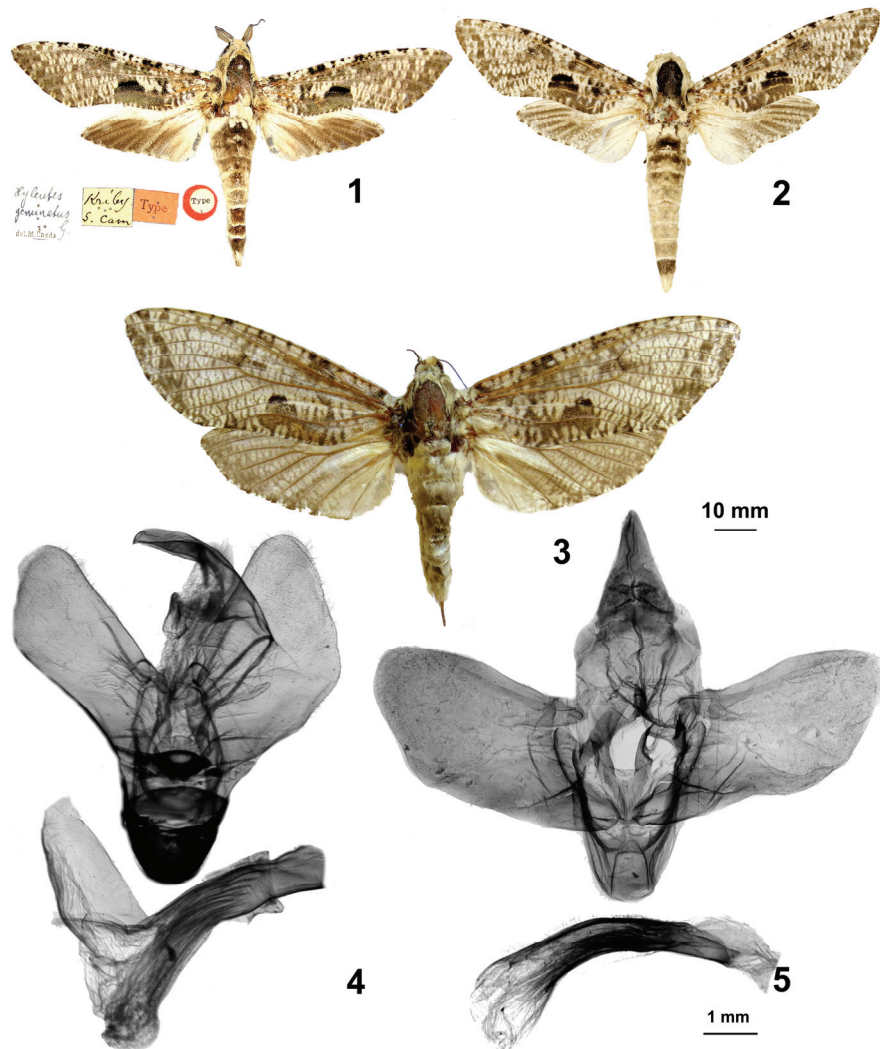
Genus *Eburgemellus* Schoorl, 1990

Type species: *Xyleutes geminatus* Gaede, 1930, by monotypy.

REDESCRIPTION. MALE. Big size, wingspan 90–115 mm. Antennae bipectinate in basal half, simple in distal half. Thorax dark brown, tegulae of coffee-with-milk color. Abdomen densely covered with coffee-with-milk scales, sputtering of brown scales on upper side of three basal segments and apical segment. Fore wing narrow, apex sharp, mottled pale brown reticulated pattern developed along wing area. Bigger and darker brown spots on costal edge of fore wing and in cubital area. Hind wing with sharp apex, dense pale brown sputtering, anal edge of wing white without pattern.

MALE GENITALIA. Uncus long, strongly sclerotized with uncinate apex; tegumen of medium size; gnathos arms reduced; valve wide, leaf-like, apex rounded, costal edge even, small curve in middle third of abdominal edge; juxta robust with long dorsally directed lateral processes with sharp apices; saccus robust, semicircular;

phallus very robust, longer than valve, apically widened, slightly curved in middle third, longitudinal folding in distal half, vesica with one robust spindle-like and one long strap-like cornutus in lateral surface.



Figs 1–5. Imago and male genitalia of *Eburgemellus geminatus* (Gaede, 1930). 1 – holotype, male (BMNH); 2 – male, Cot d'Ivoire (MWM); 3 – female, Congo (MRAC); 4 – holotype, GenPr Coss–287 (BMNH); 5 – GPr Heterocera MWM: 33.165.

FEMALE (described on single female from Congo in MRAC). Very big, wingspan 152 mm. Antennae simple. Wings significantly wider than those of male,

dense reticulated pale brown pattern throughout wing area with bigger spots on costal edge and in cubital area of fore wing. Genitals not studied.

DIAGNOSIS AND TAXONOMICAL NOTES. In the external features and male genital structure (the long uncinat uncus, reduced gnathos arms, robust phallus with longitudinal folding, vesica with the spindle-like and long strap-like cornuti), the genus *Eburgemellus* Schoorl, 1990 is similar to the genera *Strigocossus* Houlbert, 1916 (type species: *Strigocossus leucopteris* Houlbert, 1916), *Xyleutes* Hübner, [1820] 1816 (type species: *Phalaena (Noctua) strix* Linnaeus, 1758), *Duomitus* Butler, 1880 (type species: *Duomitus ligneus* Butler, 1880), *Endoxyla* Herrich-Schäffer, [1854] (type species: *Endoxyla durvilli* Herrich-Schäffer, [1854]) and other representatives of Xyleutini Houlbert, 1916 (type genus: *Xyleutes* Hübner, [1820] 1816). The most reliable feature distinguishing it from the other genera is the specific brown reticulated pattern on the wings and the sharp apices of the juxta lateral processes.

COMPOSITION. The genus is monotypic and comprises one species.

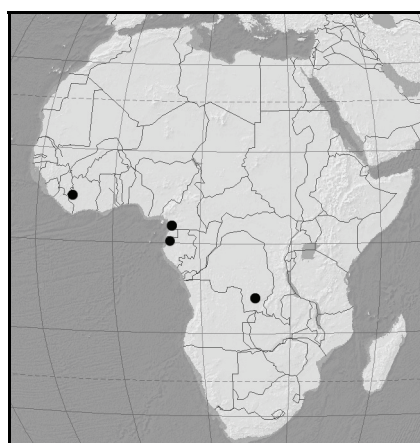


Fig. 6. Map of distribution of *Eburgemellus geminatus* (Gaede, 1930).

***Eburgemellus geminatus* (Gaede, 1930)**

Figs 1–6

Xyleutes geminatus Gaede, 1930: 546, Taf. 80c (holotype – male, Africa: Kriby, S. Cam. [= Kribi, SW Cameroon]; in BMNH; examined).

MATERIAL EXAMINED. **Cameroon:** Kriby, S. Cam., 1 ♂ (BMNH, GenPr Coss–287); **Gabon:** Baraka, 3 km NE No-Ayong village, 0°36'24" N, 9°41'37" E, 1–3.VI 2011, 2 ♂, leg. Viktor Siniaev & Yury Bezverkhov (MWM); **Congo:** Kafakumba, X 1931, 1 ♀, leg. F.G. Overlaet (MRAC); **Cot d'Ivoire:** Elfenbeinkoste, Danane, 4.III 1981, 2 ♂, leg. Dr. Politzar (GPr Heterocera MWM: 33.165).

DISTRIBUTION. Cameroon, Cot d'Ivoire, Congo, Gabon (Fig. 6).

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